

C57BL/6-*Dyrk1a*^{tm1Jdc}/J

Stock No: **027801** | *Dyrk1a* flox

 Coisogenic, Targeted Mutation

Live mice available in varying quantities. Ask Customer Service for details.

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phosphorylation regulated kinase 1a) gene. This strain may be useful for generating conditional mutations in applications related to a range of cellular processes including, but not limited to: lymphopoiesis, transcription, mRNA splicing, and cell proliferation. *Dyrk1a* is located in the Chromosome 21 Down syndrome critical region.

Donating Investigator

John D. Crispino, Northwestern University

READ MORE +

GENETIC OVERVIEW

Genetic Background

Generation

?+pN1F12
(2019-12-17 00:00:00)

Dyrk1a^{tm1Jdc}

Alele Type

Targeted (Conditional ready (e.g. floxed), No functional change)

Gene Symbol

Dyrk1a

Gene Name

dual-specificity tyrosine-(Y)-phosphorylation regulated kinase 1a

VIEW GENETICS

RESEARCH APPLICATIONS

Research Tools

VIEW ALL RESEARCH APPLICATIONS

BASE PRICE

Starting at:

\$278.00 Domestic price for female 4-week

V I E W P R I C E L I S T

Details

Detailed Description

Dual-specificity tyrosine-(Y)-phosphorylation regulated kinase 1a is known to phosphorylate more than 30 proteins and is involved in transcription, mRNA splicing, cell proliferation, synaptic transmission, beta-amyloid regulation, tau phosphorylation, and megakaryocytic leukemia associated with Down syndrome. *Dyrk1a* is located in the Chromosome 21 Down syndrome critical region.

These mice possess *loxP* sites flanking exons 5 and 6 of the targeted *Dyrk1a* gene. Exons 5 and 6 encode part of the kinase domain of the protein. Mice that are homozygous for this allele are viable and fertile. When these mutant mice are bred to mice that express Cre recombinase, resulting offspring will have exons 5 and 6, and the FRT-flanked PGK-NEO cassette, deleted in the *cre*-expressing tissues.

When bred to a strain with Cre recombinase expression during hematopoiesis (see Stock No. [006785](#) and Stock No. [003802](#) for examples), this mutant mouse strain may be useful in studies of Cyclin D3 regulation and lymphopoiesis.

Development

Control Suggestions

Selected References

Genetics

Dyrk1a^{tm1Jdc}

Disease/Phenotype

[+ Disease Terms](#)

[+ Research Areas By Phenotype](#)

[+ Mammalian Phenotype Terms by Genotype](#)

[+ References](#)

[- Technical Support](#)

C O N T A C T T E C H N I C A L S U P P O R T

Genotyping Protocols

Standard PCR:[Dyrk1a-Alternate 1](#)

[Genotyping resources and troubleshooting](#)

Breeding Considerations

When maintaining a live colony, these mice can be bred as homozygotes.

[Additional Breeding and Husbandry Support](#)

Mating System

Homozygote x Homozygote

Citation

When using the Dyrk1a flox mouse strain in a publication, please [cite the originating article\(s\)](#) and include JAX stock #027801 in your Materials and Methods section.

Animal Health Reports

[Facility Barrier Level Descriptions](#)

 [AX9 \(Standard\)](#)

[- Pricing & Availability](#)



Live mice available in varying quantities. Ask Customer Service for details.

Available

Domestic **International**

Pricing effective for USA, Canada and Mexico shipping destinations

LIVE MOUSE

AGE	SEX	GENOTYPE	PRICE
4 weeks	Female	Homozygous for Dyrk1a ^{tm1Jdc}	\$278.00
	Male	Homozygous for Dyrk1a ^{tm1Jdc}	\$278.00
5 weeks	Female	Homozygous for Dyrk1a ^{tm1Jdc}	\$278.00
	Male	Homozygous for Dyrk1a ^{tm1Jdc}	\$278.00
6 weeks	Female	Homozygous for Dyrk1a ^{tm1Jdc}	\$278.00
	Male	Homozygous for Dyrk1a ^{tm1Jdc}	\$278.00
7 weeks	Female	Homozygous for Dyrk1a ^{tm1Jdc}	\$278.00
	Male	Homozygous for Dyrk1a ^{tm1Jdc}	\$278.00
8 weeks	Female	Homozygous for Dyrk1a ^{tm1Jdc}	\$278.00
	Male	Homozygous for Dyrk1a ^{tm1Jdc}	\$278.00
9 weeks	Female	Homozygous for Dyrk1a ^{tm1Jdc}	\$278.00
	Male	Homozygous for Dyrk1a ^{tm1Jdc}	\$278.00
10 weeks	Female	Homozygous for Dyrk1a ^{tm1Jdc}	\$278.00
	Male	Homozygous for Dyrk1a ^{tm1Jdc}	\$278.00
11 weeks	Female	Homozygous for Dyrk1a ^{tm1Jdc}	\$278.00
	Male	Homozygous for Dyrk1a ^{tm1Jdc}	\$278.00
12 weeks	Female	Homozygous for Dyrk1a ^{tm1Jdc}	\$278.00
	Male	Homozygous for Dyrk1a ^{tm1Jdc}	\$278.00

RELATED PRODUCTS AND SERVICES

Frozen Mouse Embryo	C57BL/6-Dyrk1a<tm1Jdc>/J	\$2595.00
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PAYMENT TERMS AND CONDITIONS

Terms are granted by individual review and stated on the customer invoice(s) and account statement. These transactions are payable in U.S. currency within the granted terms. Payment for services, products, shipping containers, and shipping costs that are rendered are expected within the payment terms indicated on the invoice or stated by contract. Invoices and account balances in arrears of stated terms may result in The Jackson Laboratory pursuing collection activities including but not limited to outside agencies and court filings.

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The Jackson Laboratory has rigorous genetic quality control and mutant gene genotyping programs to ensure the genetic background of JAX® Mice strains as well as the genotypes of strains with identified molecular mutations. JAX® Mice strains are only made available to researchers after meeting our standards. However, the phenotype of each strain may not be fully characterized and/or captured in the strain data sheets. **Therefore, we cannot guarantee a strain's phenotype will meet all expectations.** To ensure that JAX® Mice will meet the needs of individual research projects or when requesting a strain that is new to your research, we suggest ordering and performing tests on a small number of mice to determine suitability for your particular project. We do not guarantee [breeding performance](#) and therefore suggest that investigators order more than

one breeding pair to avoid delays in their research.

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LICENSING INFORMATION

Phone: 207-288-6470

Email: TechTran@jax.org

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By Allele

By Gene

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